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FEDERAL - STATE - PRIVATE  
COOPERATIVE SNOW SURVEYS

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FEB 25 1966

CURRENT SERIAL RECORDS

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**COLORADO and NEW MEXICO**

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE  
and

COLORADO AGRICULTURAL EXPERIMENT STATION  
STATE ENGINEER of COLORADO  
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

||||||| AS OF |||||  
**FEB. 1, 1966**

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

### PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
<b>RIVER BASINS</b>			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
<b>STATES</b>			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
GOLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

### PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.



IN MEMORY OF

V I R G I L L. W A L L S

This is the first snow report since 1948 that Virgil Walls, Snow Surveyor for the Soil Conservation Service at Durango, Colorado did not contribute to the data herein.

Virg measured seven snow courses and three soil moisture stations as much as seven times each season. These courses were located along the famed Million Dollar Highway between Durango and Silverton and on to Ouray.

Virg loved the high country and spent many of his leisure hours hunting, roaming and relaxing in and around the mountains North of Durango.

It is with deep regret that we publish this report without the few words of personal observation about the season that Virg always included with his snow measurements.

Virg lost his life in a car accident on Coal Bank Hill, December 1965.



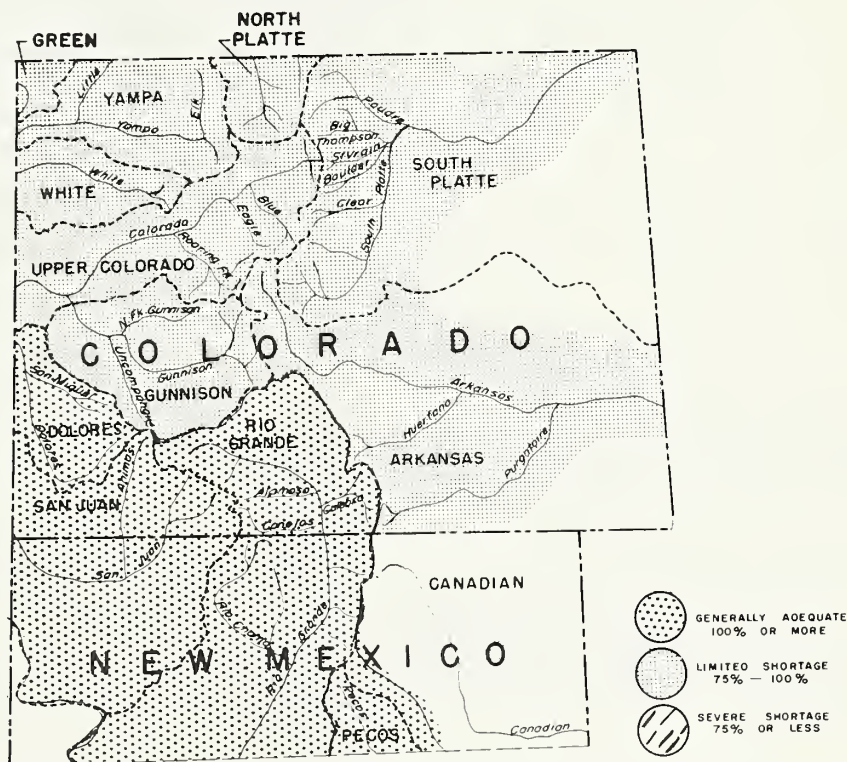
# FEDERAL-STATE COOPERATIVE SNOW SURVEYS AND WATER SUPPLY FORECASTS for COLORADO RIVER, PLATTE RIVER ARKANSAS RIVER AND RIO GRANDE DRAINAGE BASINS issued

Report Prepared By  
Jack N. Washichek, Snow Survey Supervisor  
and  
Don W. McAndrew, Assistant Snow Survey Supervisor  
Fort Collins, Colorado

United States Department of Agriculture  
Soil Conservation Service  
and  
Colorado Agricultural Experiment Station  
Fort Collins, Colorado

State Engineer of Colorado  
Denver, Colorado  
and  
State Engineer of New Mexico  
Santa Fe, New Mexico

## WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAMFLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

# WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

as of

February 1, 1966



**COLORADO** -- Snow pack over the high mountains of Colorado varies from a high of 120% of normal in the south to a low of 65% of normal in the northeastern part. Only about half the snow season is over, so normal conditions or better could exist before summer.

Reservoir storage is excellent as is the high elevation soil moisture. Valley soils are reported in good condition.



**NEW MEXICO** -- The snow pack in New Mexico is slightly above the fifteen year average as of this date. Mountain snows to the north are in especially good condition. If conditions remain the same most of the New Mexico streams should flow normal or better this summer.

Reservoir storage is about normal, but far better than last year. High mountain soil moisture is good and northern irrigated valley soils are also in good condition. Southern plains areas are dry.

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### WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

#### WATERSHED I

##### SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

#### WATERSHED II

##### ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

#### WATERSHED III

##### RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

#### WATERSHED IV

##### RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrieth, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Englewood Soil Conservation Districts.

#### WATERSHED V

##### DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin, Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

#### WATERSHED VI

##### GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

#### WATERSHED VII

##### COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

#### WATERSHED VIII

##### YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

#### WATERSHED IX

##### LOWER SOUTH PLATTE RIVER WATERSHED

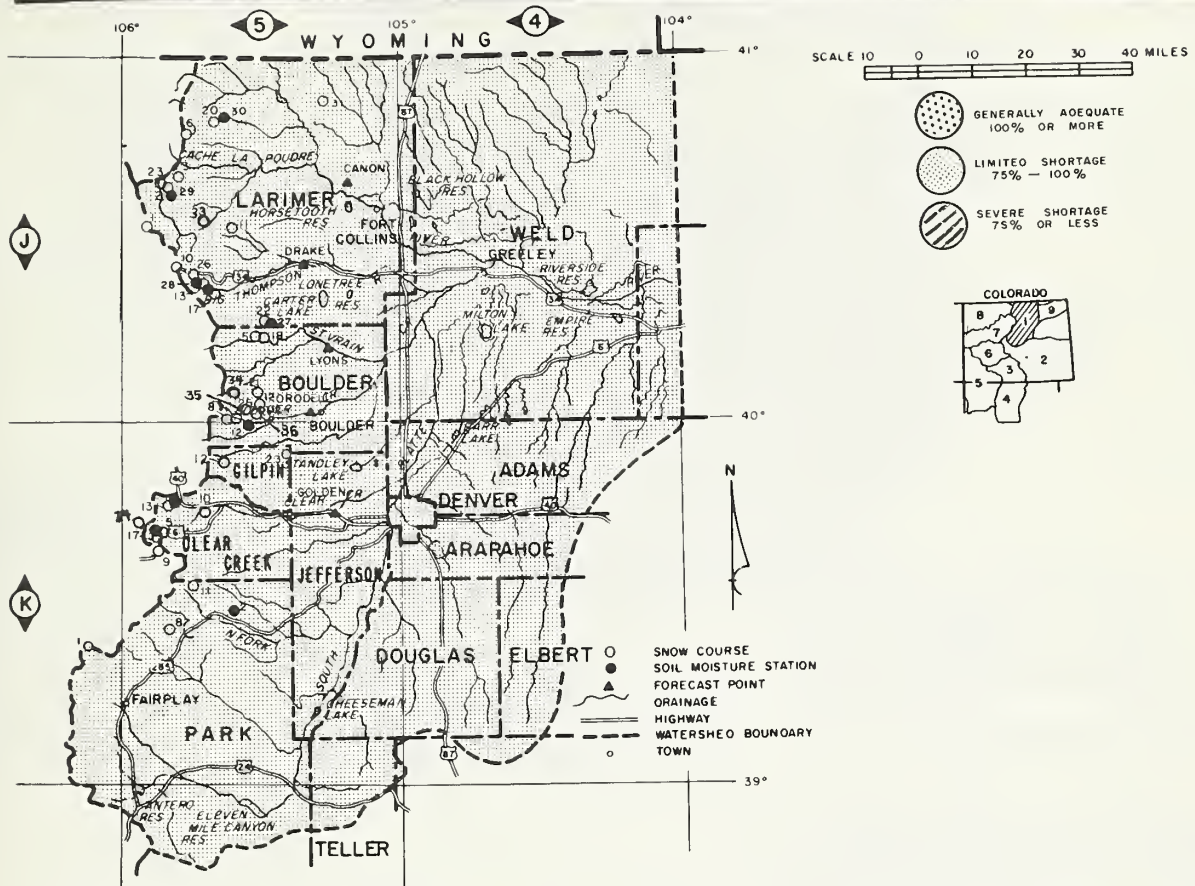
Describes water supply conditions in Sedgwick, South Platte, Haxton Peetz, Padroni, Morgan, Rock Creek and Yuma Soil Conservation Districts.



# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



So far this winter season, snowfall over the South Platte has been in short supply. Only a relatively few snow courses over the entire basin are above normal. Current readings indicate the South Platte as a whole has only 65% of the 1948-62 average snowfall and only 53% of last year. Much more snow is needed to insure average runoff, however, there are some other factors that greatly improve the general outlook for next year.

Reservoir carry-over storage is up to 150% of normal. For those water users with reservoir back up, there will be an excellent supplement. Storage is 167% better than last year. This reflects the better than normal runoff from streams last year.

In addition to good storage, mountain soils are also wet. This will give the runoff a head start next summer and tend to increase total runoff. Soil moisture stations indicate soils are 125% of average and 144% of last year. Valley soils are listed as fair to good. Snow falling over the South Platte right now should change these reports to good. Numerical forecasts will be issued the 1st of March.

**“THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY”**

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
Colorado

J. L. Hall, Area Conservationist,  
Glenwood Springs, Colorado

# SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
South Platte River & Tributaries						
Baltimore	5K23	1/31	8	1.5	6.1	- -
Berthoud Falls	5K13	1/31	28	8.8	12.5	9.0*
Big South	5J3	1/29	5	1.1	2.9	2.0
Boulder Falls	5J25	1/29	18	4.4	11.6	7.9*
Cameron Pass (A)	5J1	1/29	40	14.2	15.6	13.7
Chambers Lake	5J2	1/29	14	3.1	8.8	6.0
Copeland Lake	5J18	1/27	4	0.7	3.2	3.8*
Deadman Hill (A)	5J6	1/28	40	10.8	NS	8.8
Deer Ridge	5J17	1/27	8	1.8	2.9	3.6*
Empire	5K10				6.5	4.9*
Geneva Park	5K11	1/31	8	1.6	NS	3.5*
Grizzly Peak (B)	5K9	1/27	31	7.0	16.4	11.5
Hidden Valley	5J13	1/28	19	3.9	7.3	7.5
Hoosier Pass	6K1	1/29	23	5.5	12.6	8.1
Hour Glass Lake	5J11	NS	--	--	--	4.3
Jefferson Creek	5K8	NS	--	--	--	6.9*
Lake Irene (B)	5J10	Est.	40	11.5	18.4	14.1
Long's Peak	5J22	1/30	17	3.5	9.3	7.6*
Lost Lake	5J23	1/29	22	4.9	11.5	8.2*
Loveland Lift No. 1	5K24	1/27	41	10.7	17.2	--
Loveland Pass	5K5	1/27	27	6.0	14.0	9.6
Pine Creek	5J31	1/28	3	0.5	0.6	--
Red Feather	5J10	1/28	12	2.4	2.8	5.1*
Two Mile	5J26	1/28	25	6.1	10.3	9.0*
University Camp	5J8	1/29	23	5.8	17.5	12.9
Ward	5J21	1/27	4	0.7	3.9	4.0*
Wild Basin	5J5	Est.	28	4.9	9.6	9.4
Bennett Creek	5J33	1/26	14	2.6		

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

## STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	APRIL THROUGH SEPTEMBER		THIS YEAR	AVERAGE 1948-62
	FORECAST	PERCENT		
	APRIL - SEPT.	% AVERAGE		
No forecasts issued until March 1, 1966.				

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Tunnel.

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UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey  
 Colorado State University  
 Fort Collins, Colorado

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## RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Antero	33.0	15.9	0	13.4
Barr Lake	32.2	26.0	13.2	18.6
Black Hollow	8.0	4.2	2.5	3.1
Boyd Lake	44.0	41.2	26.6	18.4
Cache La Poudre	9.5	8.3	2.6	5.8
Carter Lake	108.9	106.3	70.5	54.0
Chambers Lake	8.8	5.5	2.3	2.0
Cheeseman	79.0	79.0	21.3	49.4
Cobb Lake	34.3	7.4	24.1	9.3
Eleven Mile	97.8	87.6	28.3	74.2
Fossil Creek	11.6	9.7	25.3	5.4
Gross	43.1	33.3	26.4	--
Halligan	6.4	4.8	4.6	2.4
Horsetooth	143.5	78.9	69.4	61.1
Lake Loveland	14.3	8.4	8.5	6.5
Lone Tree	9.2	8.0	0.5	5.6
Mariano	5.4	5.1	4.3	2.5
Marshall	10.3	6.2	0.4	2.1
Marston	18.9	15.6	14.8	13.5
Milton	24.4	13.4	1.1	10.1
Standley	18.5	15.5	3.4	8.2
Terry Lake	8.2	5.7	2.0	4.3
Union	12.7	12.7	6.4	7.6
Windsor	18.6	11.0	14.3	7.5

MEASURED FIRST OF MONTH

## SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	10/26	6.9	5.5	3.2	4.8
Beaver Dam	10/26	7.1	5.5	3.0	3.8
Clear Creek	10/29	9.5	8.0	7.0	6.7
Feather	10/23	10.1	5.1	4.2	4.6
Guard Station	10/26	6.9	5.0	2.8	3.4
Hoop Creek	12/15	4.9	3.6	2.6	2.7
Hoosier Pass	11/23	7.8	4.8	4.3	5.1
Kenosha Pass	11/23	4.4	3.1	2.3	2.6
Laramie Road	10/23	12.4	11.9	7.1	7.6
Two Mile	10/26	9.1	6/5	4.4	5.8

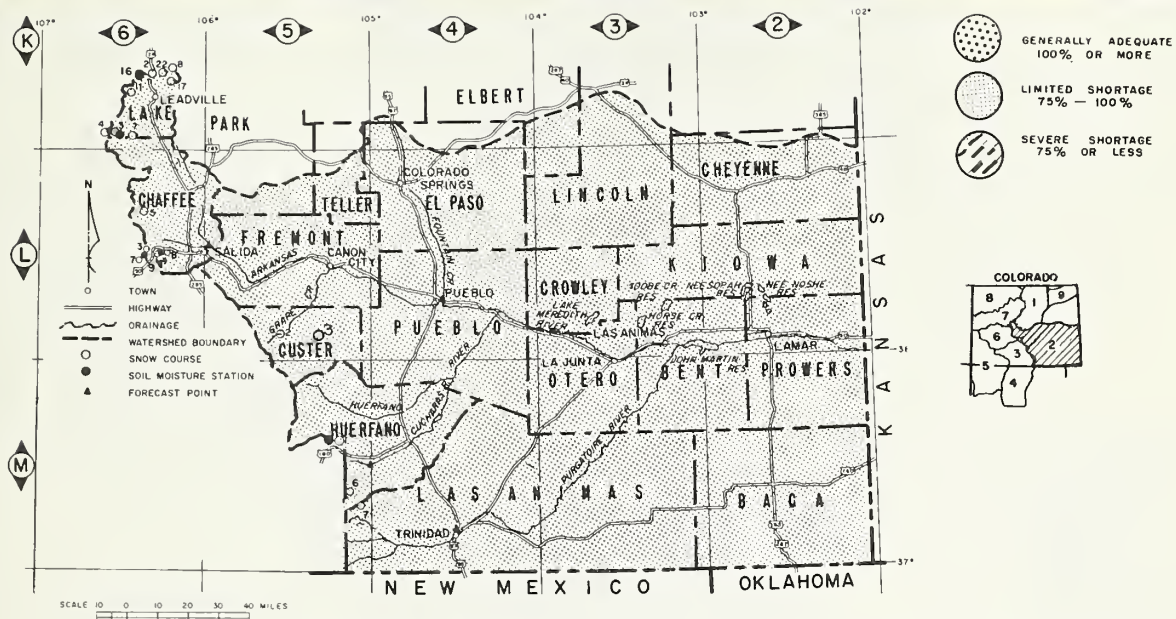
ALL PROFILES 4 FEET DEEP

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WATERSHED II

WATER SUPPLY OUTLOOK  
FOR THE SOIL CONSERVATION DISTRICTS IN THE  
**ARKANSAS RIVER WATERSHED IN COLORADO**  
as of  
February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Snowfall over the Arkansas Drainage has been spotty. Some of the lower courses indicate above average but the basin is only 81%. Current snow conditions are only 50% of last year at this time.

The lack of snow is somewhat offset by the carry-over storage and the high elevation soil moisture conditions.

Reservoirs in the basin currently contain slightly over 610,000 acre-feet. This compares to last years carry-over storage of only 22,400 acre-feet. Current storage is almost 4 times normal. The summer flooding that occurred had some good points.

Soil moisture at the high elevations is also very good. Fall readings of soil moisture stations indicated soils 160% wetter than normal. Most of the irrigated areas of the valley are reporting soils to be in good condition.

Numerical forecasts are issued starting March 1. There is considerable more winter to come and plenty of time to increase the snow pack.

**"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"**

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
Colorado

Will D. McCorkle, Area Conservationist,  
La Junta, Colorado



# SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
Arkansas River						
Bigelow Divide	5L3	NS	--	--	--	--
Blue Lakes	5M6	1/30	9	1.6	2.9	--
Bourbon	5M5	NS	--	--	--	--
Cooper Hill	6K23	1/30	25	5.1	9.5	--
Cucharas Pass	5M7	1/30	26	5.9	5.7	--
East Fork	6K17	1/28	21	5.1	9.4	5.9*
Four Mile Park	6K7	1/30	17	4.4	7.3	3.4
Fremont Pass	6K8	1/28	30	7.8	12.8	10.7
Garfield	6L8	1/27	27	7.1	12.6	--
LaVeta Pass (B)	5M1	1/29	27	6.4	8.9	6.8
Monarch Pass	6L4	1/27	32	8.3	14.0	11.5
St. Elmo (A)	6L5	1/29	20	4.4	--	8.7*
Tennessee Pass	6K2	1/30	28	6.6	9.8	6.4
Tomichi	6L7	1/27	27	6.7	11.9	--
Twin Lakes Tunnel	6K3				8.3	6.9
Westcliffe	5L2				--	--

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

# RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Adobe Creek	61.6	57.1	0	13.1
Clear Creek	11.4	11.2	10.4	5.3
Cucharas	40.0	0	0	5.2
Great Plains	150.0	60.0	0	40.0
Horse Creek	26.9	23.3	0	5.2
John Martin	366.6	375.6	1.0	70.8
Meredith	41.9	26.0	0	6.2
Model	15.0	3.9	0	2.3
Sugar Loaf	17.4	15.5	5.3	6.8
Twin Lakes	57.9	52.1	11.0	19.3

MEASURED FIRST OF MONTH

# SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Garfield	11/9	6.7	6.1	4.7	3.3
King	11/9	3.3	3.0	2.3	1.8
LaVeta Pass	12/8	11.9	10.6	6.1	7.0
Leadville	11/15	7.8	5.6	5.2	3.9
Twin Lakes Tunnel	11/15	4.5	3.6	3.0	2.1

ALL PROFILES 4 FEET DEEP

# STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER		THIS	
STREAM AND STATION	FORECAST APRIL - SEPT.	YEAR %	AVERAGE 1948-62
No forecasts issued until March 1, 1966.			

- (1) Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

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UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey  
 Colorado State University  
 Fort Collins, Colorado

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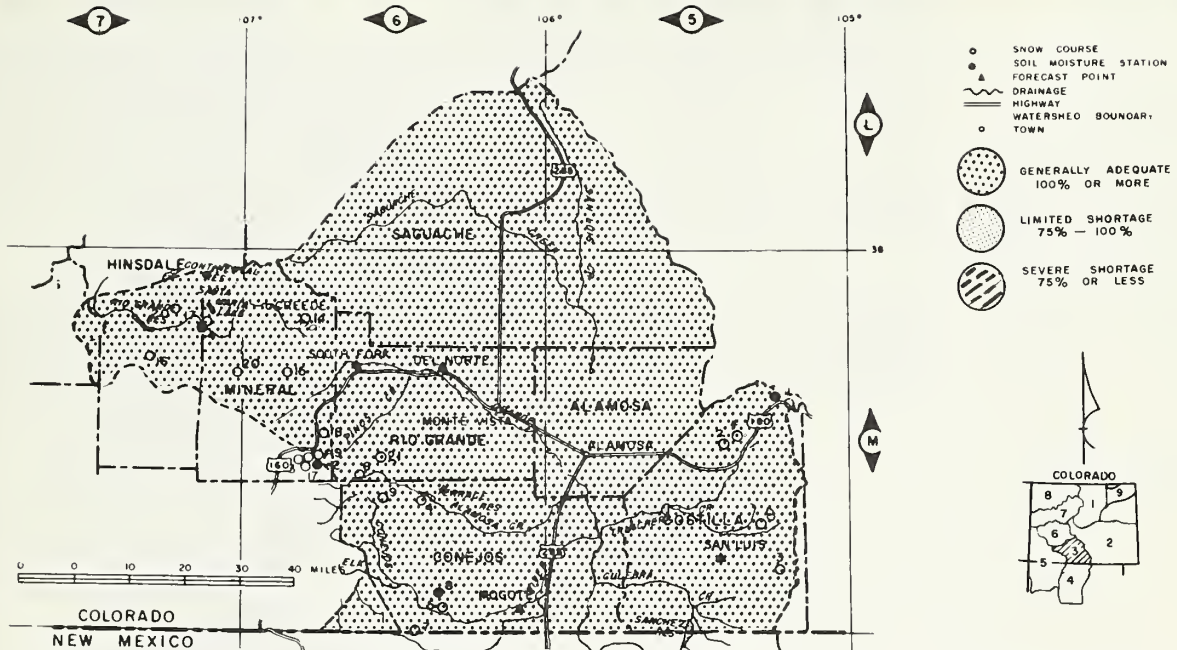


# UPPER RIO GRANDE WATERSHED IN COLORADO

as of

February 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The snow pack in the Rio Grande Drainage doesn't look as good as last year at this time, but it still is the highest in the State. Current snow readings on the main stem of the Rio Grande indicate 115% of the 15 year average. The Alamosa and Conejos Drainages are also slightly above normal.

Water supply conditions should be at least normal if the snow remains at this percentage. Reservoir storage is considerably better than last year. Last year at this time there was only 14,200 acre-feet of storage. This year the same reservoirs contain 88,200 acre-feet of storage. This will be an excellent supplement to next years runoff. Normal carry-over storage in these reservoirs is low.

The mountain soils wetted, by the early season storms, should also increase prospects for runoff this summer. Current readings show soils to be 150% wetter than average.

The Rio Grande snow pack is unpredictable from one month to the next, but considerable time remains to increase the snow pack.

Numerical forecasts will start March 1st, but general conditions indicate a near normal water supply this summer.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
Colorado

Benny Martin, Area Conservationist,  
Durango, Colorado

# SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
<u>Rio Grande in Colorado</u>						
Cochetopa Pass	6L6	1/26	19	2.5	3.9	3.9
Hiway	6M19	1/28	50	19.4	27.4	14.6*
Lake Humphreys (A)	6M15	1/29	24	6.0	11.7	-
Pass Creek	6M18	1/28	39	12.0	16.0	8.2*
Pool Table (A)	6M14	1/29	28	7.0	10.0	-
Porcupine (A)	6M20	1/29	32	8.0	11.4	9.0*
Red Mountain Pass (B)	7M15	1/26	62	18.0	25.6	18.0*
Santa Maria	7M17	1/29	23	3.8	-	4.1
Upper Rio Grande	7M16	1/25	30	7.0	10.4	6.1
Wolf Creek Pass	6M1	1/28	64	23.8	30.8	19.3
Wolf Creek Summit (B)	6M17	1/28	71	24.7	30.9	19.1*
<u>Alamosa River</u>						
Silver Lakes	6M4	NS	--	-	-	5.1
Summitville (A)	6M6	1/29	44	14.1	18.6	11.9
<u>Conejos River</u>						
Cumbres Pass (A)	6M7	1/29	55	19.3	23.8	13.0
Platoro (A)	6M9	1/29	48	14.4	20.5	-
River Springs	6M5				9.8	6.0
<u>Sangre De Cristo Range</u>						
Blue Lakes (B)	6M6	1/30	9	1.6	2.9	-
Cucharas Pass (B)	5M7	1/30	26	5.9	5.7	-
Culebra (A)	6M3	1/29			9.1	6.6
LaVeta Pass	5M1	1/29	27	6.4	8.9	6.8

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

# RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Continental	26.7	8.4	1.0	4.7
Platoro	60.0	17.3	2.7	- -
Rio Grande	45.8	35.6	4.6	11.9
Sanchez	103.2	15.2	4.3	10.2
Santa Maria	45.0	18.1	2.6	6.6
Terrace	17.7	10.9	1.7	2.7

MEASURED FIRST OF MONTH

# SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alberta Park	12/8	8.2	8.2	5.9	4.8
Bristol View	11/24	6.1	4.9	3.5	4.4
LaVeta Pass	12/8	11.9	10.6	6.1	7.0
Mogote	12/7	10.7	6.7	5.0	5.3

ALL PROFILES 4 FEET DEEP

# STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
--------------------	------------------------	---------------------	-----------------

No forecasts issued  
 until March 1, 1966.

- (1) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir.
- (2) Observed flow plus changes in storage in Sanchez Reservoir.

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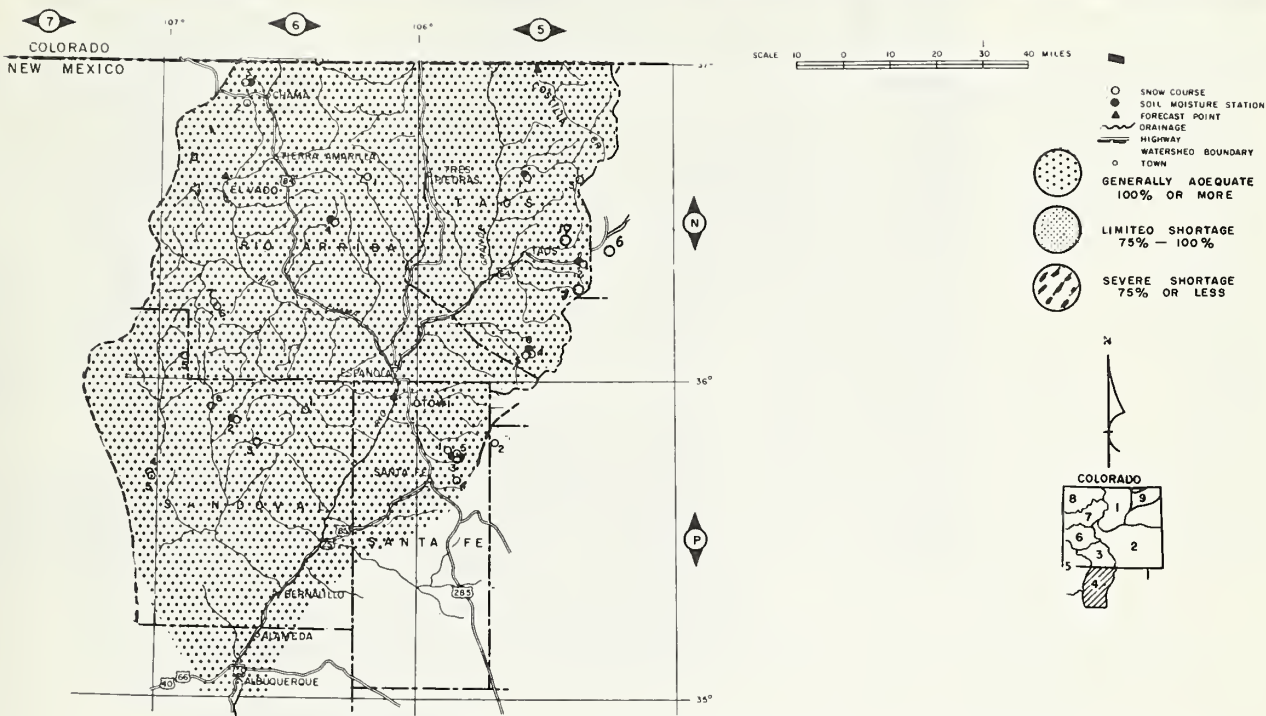
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# RIO GRANDE WATERSHED IN NEW MEXICO as of

February 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The snow pack over the Rio Grande Basin in Colorado and New Mexico is 115% of the 1948-62 normals. Most of the northern snow courses in New Mexico are above normal, but some of the southern and central courses are just normal to slightly below.

Snow on the Pecos Drainage is above normal and should produce above average runoff. The San Juan and its tributaries have about 120% of normal snow cover and should produce above average spring runoff.

Soil moisture conditions in the high country are excellent. This will tend to increase summer runoff.

Valley soils are reported to be in good condition in north and central New Mexico and in fair to poor condition in the south.

Reservoir carry-over storage is slightly better than normal and far better than last year at this time. This will be an excellent supplement to water users fortunate enough to have storage.

Numerical forecasts are not issued until March 1st, but water supplies should be at least normal this summer.

“THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY”

Issued By: Soil Conservation Service

Einar L. Roget, State Conservationist,  
Albuquerque, New Mexico

Walter B. Rumsey, Area Conservationist,  
Santa Fe, New Mexico



SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	AVERAGE 1948-62
Rio Grande (Colorado)						
Culebra (A)	6M3				9.1	6.6
Cumbers Pass (A)	6M7	1/29	55	19.3	23.8	13.0
LaVeta Pass	5M1	1/29	27	6.4	8.9	6.8
Platoro (A)	6M9	1/29	48	14.4	20.5	-
River Springs	6M5	NS	--	-	9.8	6.0
Santa Maria	7M17	1/29	23	3.8		4.1
Silver Lakes	6M4	NS	--	-		5.1
Summitville (A)	6M6	1/29	44	14.1	18.6	11.9
Upper Rio Grande	7M16	1/25	30	7.0	10.4	6.1
Wolf Creek Pass	6M1	1/28	64	23.8	30.8	19.3
Aspen Grove (New Mexico)	5P1	NS	--	-	6.3	3.0
Bateman	6N4	NS	--	-		7.8*
Big Tesuque	5P3	1/25	23	4.5	7.9	3.7
Blue Bird Mesa	6P6	1/28	20	4.8	4.8	-
Capuline Peak	6N6	1/27	16	2.5	5.9	-
Chama Divide	6N2	1/28	18	5.9	5.4	3.9
Chamita	6N3	1/28	32	7.8	7.3	6.8
Cordova (A)	5N5	1/29	20	4.2	9.8	7.0
Elk Cabin	5P4	1/27	13	2.8	4.3	2.9
Fenton Hill	6P2	1/30	19	4.1	4.6	3.4*
Hematite Park	5N3	1/31	19	4.1	4.8	3.8
Mora View	5N7	1/28	4	0.8	3.0	-
Pajarito Peak	6P4	1/27	8	2.3	0.7	-
Panchuela	5P2	1/27	17	4.3	4.5	2.6
Payrole (A)	6N1	1/29	25	5.8	9.3	7.0
Philmont	5N6	NS	--	-		-
Quemazon	6P1	1/26	27	6.0	8.4	6.8*
Red River	5N1	1/31	21	4.8	6.8	5.3
Rio En Medio	5P5	1/25	31	7.4	9.8	5.2*
Sandavol	6P3	1/26	21	4.4	0.9	-
Taos Canyon	5N2	2/1	17	3.2	5.2	3.9
Tres Ritos	5N4	1/28	13	2.6	5.4	3.8
Twinning	5N10	2/1	40	11.0		

# RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Alamogordo	122.1	49.0	18.0	74.3
Elephant Butte	2206.8	567.6	122.6	390.2
El Vado	194.5	0	2.4	25.7
Caballo	344.0	19.9	12.3	79.8
McMillan-Avalon	37.0	8.7	2.6	15.1
Red Bluff (Tex)	307.0	51.8	19.4	71.4
Conchas	600.0	249.2	3.6	239.5

MEASURED FIRST OF MONTH

# SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
<b>Colorado</b>					
Alberta Park	12/8	8.2	8.2	5.9	4.8
Bristol View	11/24	6.1	4.9	3.5	4.4
Mogote	12/7	10.7	6.7	5.0	5.3
<b>New Mexico</b>					
Aqua Piedra		7.2		2.4	3.5
Bateman	10/21	6.7	4.6		2.2
Big Tesuque	11/2	3.7	3.7	0.5	1.2
Chamita	11/15	8.0	5.0	2.4	2.0
Fenton Hill	10/21	6.5	4.2	2.2	-
Red Summit	10/29	4.8	1.7	1.5	2.5
Rio En Medio	11/2	3.5	3.5	0.6	1.1
Taos Canyon	10/29	3.3	2.3	1.7	2.3

ALL PROFILES 4 FEET DEEP

# STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER			THIS	1947
STREAM AND STATION	FORECAST	YEAR	AVERAGE	
	APRIL - SEPT.	% AVERAGE	1948-62	
No forecasts issued until March 1, 1966.				

NOTE: \* - 1948-62 (adjusted averages)  
NS - NO SURVEY  
(A) - AIR OBSERVED  
(B) - ON ADJACENT DRAINAGE

This Report Prepared by  
Jack N. Washichek and  
Don W. McAndrew  
Soil Conservation Service  
Colorado State University  
Fort Collins, Colorado

(10) Observed flow plus changes in storage in El Vado and Abiquiu Reservoirs.

Rio Grande at San Marcial is  
Forecast at \_\_\_\_% of the Elephant  
Butte Irrigation District's normal.

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SOIL CONSERVATION SERVICE

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Colorado State University  
Fort Collins, Colorado

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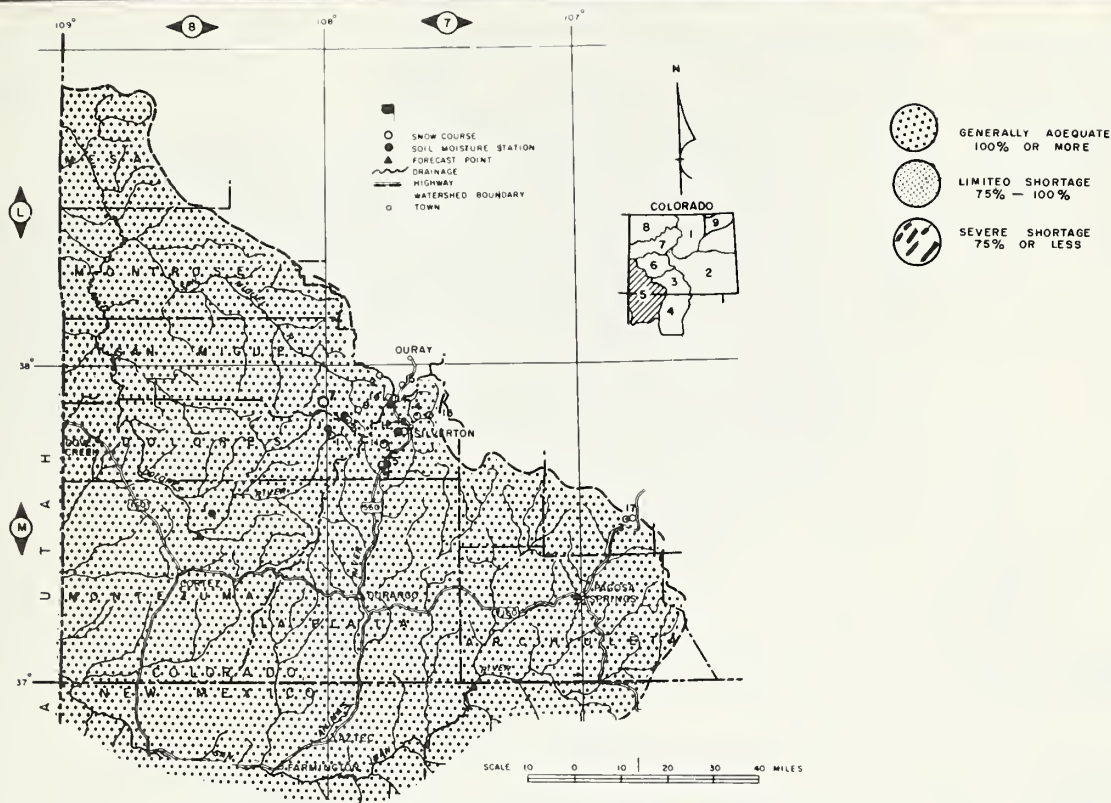
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WATER SUPPLY OUTLOOK WATERSHED V  
FOR THE SOIL CONSERVATION DISTRICTS IN THE  
**SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN**  
**WATERSHEDS IN COLORADO AND NEW MEXICO**

as of  
February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
**COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO**



Snow courses that last year, at this time, had 30 inches of water now have only 20, but the entire basin is still above normal. The San Juan Basin, primarily due to the Wolf Creek area, is 122% of the 1948-62 average. The Animas and Dolores Basins are 108% of average. These basins are only 75% of last year. At the writing of this report snow is falling over most of the state, so stated averages are probably slightly low.

Navajo Reservoir contains 284,000 acre-feet compared to last years 331,000 acre-feet. Both Vallecito and Groundhog Reservoirs contain more carry-over than last year and more than average.

Soil moisture in the high mountain areas is excellent. The Cortez and Durango areas report good soil moisture in the irrigated areas. All signs now point to at least normal water supplies this summer. Above average snows for the remainder of the year could make 1966 a high water production year.

Numerical forecasts will be made starting March 1st.

**'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'**

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
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Dearl Beach, Area Conservationist,  
Grand Junction, Colorado

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
<u>San Juan River</u>						
Chama Divide (B)	6N2	1/28	18	5.9	5.4	3.9
Chamita (B)	6N3	1/28	32	7.8	7.3	6.8
Upper San Juan	6M3	1/28	74	24.5	31.3	21.7
Wolf Creek Pass (B)	6M1	1/28	64	23.8	30.8	19.3
Wolf Creek Summit	6M17	1/28	71	24.7	30.9	19.1*
<u>Animas River</u>						
Cascade	7M5	1/27	37	10.2	12.4	8.9
Howardville	7M13	1/26	37	9.2	11.7	8.8*
Ironton Park (B)	7M6	1/28	32	8.2	10.1	7.7
Mineral Creek	7M14	1/26	39	9.6	15.3	-
Molas Lake	7M12	1/26	38	10.0	14.7	9.8*
Red Mountain Pass	6M19	1/26	62	18.0	25.6	18.0*
Silverton Sub-Station	7M4	1/26	31	7.3	8.9	4.6
Spud Mountain	7M11	1/27	55	18.0	23.1	16.7*
<u>Dolores River</u>						
Lizzard Head	7M3	1/28	43	12.4	16.4	10.9
Rico	7M1	1/28	26	6.4	8.5	5.9
Telluride	7M2	1/28	23	4.8	6.3	5.0
Trout Lake	7M9	1/28	37	9.1	12.2	8.6*

# RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Groundhog	21.7	18.4	6.7	5.7
Vallecito	126.3	74.0	33.8	45.8
Navajo	1036.0	284.0	331.0	-

MEASURED FIRST OF MONTH

# SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Cascade	11/26	9.1	7.6	5.3	6.7
Dolores	11/10	19.6	9.8	0.5	4.3
Lizzard Head	11/10	11.8	8.3	9.9	8.2
Mineral Creek	11/26	5.7	4.8	3.9	3.6
Molas Lake	11/26	9.4	7.9	3.9	4.2
Rico	11/10	13.8	13.5	13.1	9.1

ALL PROFILES 4 FEET DEEP

NOTE: \* - 1948-62 (adjusted averages)  
NS - NO SURVEY  
(A) - AIR OBSERVED  
(B) - ON ADJACENT DRAINAGE

# STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER			
STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1966.			

This Report Prepared by  
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Fort Collins, Colorado

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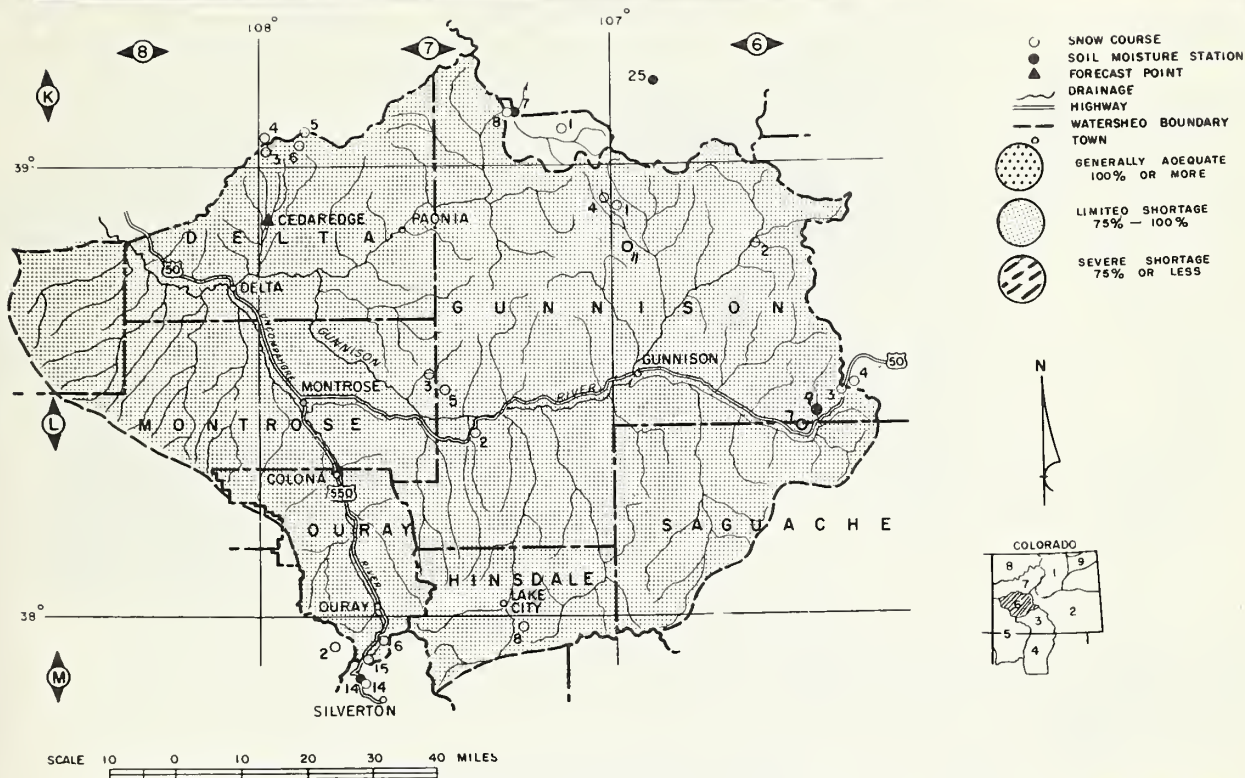
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WATER SUPPLY OUTLOOK  
FOR THE SOIL CONSERVATION DISTRICTS IN THE  
**GUNNISON RIVER WATERSHED IN COLORADO**  
as of

February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Snowfall over most of the Gunnison has been light, however, the Grand Mesa area indicates a good snow pack. It is unusual to have one small area above normal while surrounding areas are below. The added snow could have been picked up by one major storm that missed adjoining areas. The Uncompahgre River Basin is just slightly above normal.

Snow pack over the entire Gunnison Drainage is 96% of the 15 year average, but courses on Grand Mesa are all above normal. The snow pack is less than last year, but still in good condition. The Uncompahgre is 74% of last year, but 105% of normal.

Soils were checked after the first major snowfall of the season. This snow subsequently melted, so mountain soils were left in good shape. Current readings indicate soil moisture is 150% of last year and considerably better than average. The soil mantle on Grand Mesa was saturated going into the winter.

Storage in Taylor and Vega Reservoirs is slightly better than last year and better than normal.

The season is too young to make reliable forecasts. Numerical forecast will start March 1st. Generally speaking if the snow packs doesn't increase percentage wise, near normal conditions should exist.

**"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"**

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
Colorado

Dearl Beach, Area Conservationist,  
Grand Junction, Colorado



# SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
Gunnison River						
Alexander Lake (A)	7K3	1/27	41	12.3	13.5	12.9
Black Mesa	7L5	NS	--	--	--	--
Blue Mesa	7L2	NS	--	--	--	--
Butte	6L11	1/26	38	9.4	14.9	--
Cochetopa Pass	6L6	1/25	19	2.5	3.9	3.9*
Crested Butte	6L1	1/26	36	7.9	13.3	8.9
Keystone	7L3	1/26	45	12.5	20.9	--
Lake City	7M8	NS	--	--	--	--
Long Gulch	7L4	NS	--	--	--	--
Mesa Lakes (B)	7K4	1/28	41	11.7	11.9	10.8
Monarch Pass (B)	6L4	1/27	32	8.3	14.0	11.5
McClure Pass (A)	7K8	1/27	40	13.2	16.8	12.5*
Mineral Creek (B)	7M14	1/26	39	9.6	15.3	--
North Lost Trail (A)(B)	7K1	1/27	35	9.4	15.9	9.5
Park Cone	6L2	1/24	26	5.2	10.1	7.1
Park Reservoir (A)	7K6	1/27	58	17.4	17.1	13.9
Porphyry Creek	6L3	1/27	35	8.8	13.4	10.5
Tomichi	6L7	1/27	27	6.7	11.9	--
Trickle Divide (A)(B)	7K5	1/26	56	16.9	17.1	15.3
Uncompahgre River						
Ironton Park	7M6	1/28	32	8.2	10.1	7.7
Lizzard Head	7M3	1/28	43	12.4	16.4	10.9
Lone Cone	7M7	NS	--	--	--	--
Red Mountain Pass (B)	7M15	1/26	62	18.0	25.6	18.0
Telluride	7M2	1/28	23	4.8	6.3	5.0
Trout Lake	7M9	1/28	37	9.1	12.2	8.6*

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

## STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	APRIL THROUGH SEPTEMBER		
	FORECAST	THIS YEAR	AVERAGE
	APRIL - SEPT.	% AVERAGE	
No forecasts issued until March 1, 1966.			

\* OBSERVED FLOW PLUS CHANGES IN STORAGE IN VALLECITO RESERVOIR

## RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Taylor	106.2	80.0	70.9	54.0

MEASURED FIRST OF MONTH

## SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Grand Mesa	11/10	12.5	12.5	9.0	--
King	11/9	3.3	3.0	2.3	1.8
Mineral Creek	11/26	5.7	4.8	3.9	3.6
Placita	12/7	9.3	8.4	3.9	5.1

ALL PROFILES 4 FEET DEEP

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SOIL CONSERVATION SERVICE

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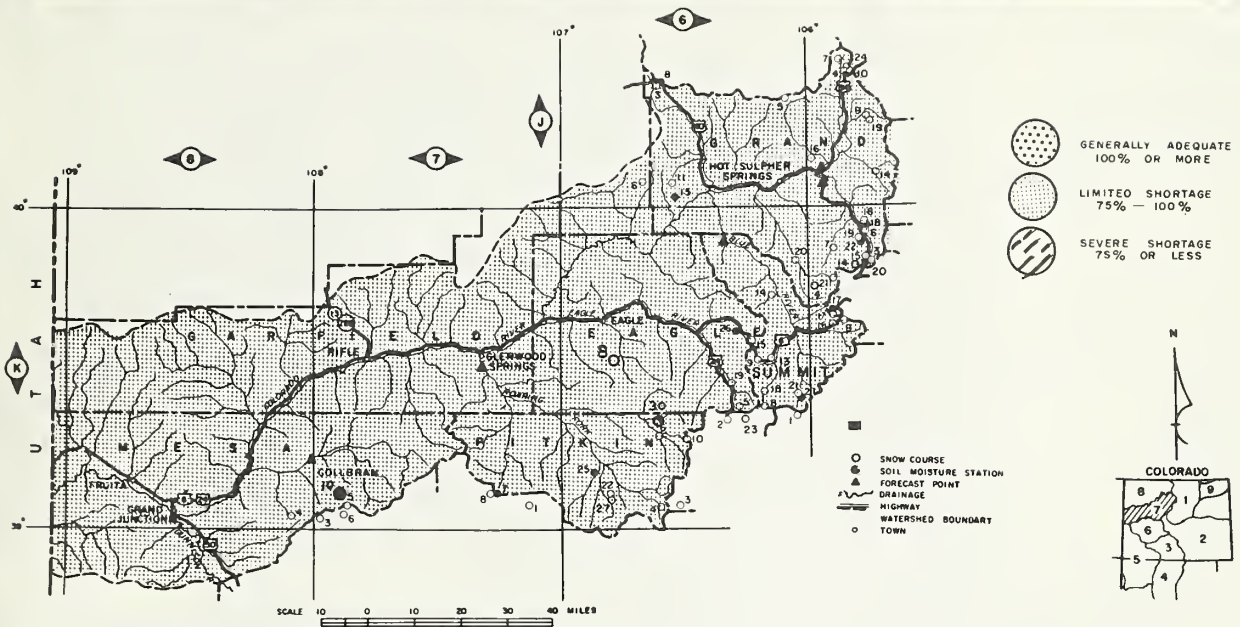
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WATER SUPPLY OUTLOOK  
FOR THE SOIL CONSERVATION DISTRICTS IN THE  
**COLORADO RIVER WATERSHED IN COLORADO**  
as of

February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The snow pack covering the main stem of the Colorado River is 75% of normal for this date. Last year at this time many of the snow courses had twice the present snow pack. The snowfall on the Roaring Fork Drainage is near normal, while Plateau Creek has about 110% of the 1948-62 average.

Snowfall this season started off real encouraging, but was almost entirely lacking during January. We have about 60% of the snow season behind us. If the remaining 40% is normal or above, the Colorado Drainage should be in excellent shape again this year.

The soil moisture level was checked after the first major snowfall of the season. The findings indicated that all areas covered by this report are in excellent condition. Currently the moisture level is running about 125% for the basin. Some of the areas checked are currently at field capacity.

The large reservoirs in the basin are currently above normal and much above last year at this time. This water would be an excellent reserve if the remaining snowfall is not normal.

Generally speaking, normal or near normal conditions should exist this coming irrigation season.

**"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"**

Issued By: Soil Conservation Service

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J. L. Hall, Area Conservationist,  
Glenwood Springs, Colorado

## SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
Colorado River						
Arrow	5K6	1/28	28	5.9	9.6	6.8
Berthoud Pass	5K3	1/28	32	7.0	10.9	9.2
Berthoud Summit	5K14	1/31	29	8.4	14.3	12.3*
Blue River	6K21	1/29	18	3.7	8.5	5.2*
Cooper Hill	6K23	1/30	25	5.1	9.5	-
Fiddlers Gulch	6K5	Est.	28	7.6	12.2	10.5
Fremont Pass	6K8	1/28	30	7.8	12.8	10.7
Frisco	6K13	1/28	17	3.1	6.5	5.6*
Glen Mar Ranch	6K20	1/26	22	4.1	6.3	5.6
Gore Pass	6J11	1/27	20	4.1	8.5	6.8*
Granby	5J16	1/28	22	4.8	7.7	4.9*
Grand Lake	5J19	1/28	24	4.4	7.5	5.7*
Grizzly Peak	5K9	1/27	31	7.0	16.4	11.5
Hoosier Pass	6K1	1/29	23	5.5	12.6	8.1
Jones Pass	5K21	1/28	31	6.9	10.3	8.5*
Lake Irene	5J10	Est.	40	11.5	18.4	14.1
Lapland	5K7	1/26	23	5.0	8.5	-
Lulu	5J7	NS	--	--	--	--
Lynx Pass	6J6	1/27	26	4.9	9.0	7.2
McKinzie Gulch	6K28	1/26	19	3.1	5.3	--
Middle Fork Campground	5K4	1/26	26	5.4	7.2	6.0
Milner	5J24	NS	--	--	--	--
Monarch Lake	5J14	NS	--	--	--	7.5
North Inlet to Grand Lake	5J9	Est.	26	4.8	8.1	6.4
Pando	6K19	1/28	21	4.9	8.6	5.9*
Phantom Valley	5J4	1/28	27	5.9	8.3	7.2
Ranch Creek	5K18	1/28	20	3.7	7.2	5.1*
Shrine Pass	6K9	1/28	33	7.3	11.4	11.1
Snake River	5K16	1/27	21	3.7	8.5	6.1*
Summit Ranch	6K14	Est.	24	4.4	7.2	5.6*
Tennessee Pass	6K2	1/30	28	6.6	9.8	6.4
Vail Pass	6K15	1/28	34	9.4	15.2	10.9*
Vasquez Creek	5K19	1/28	27	4.9	9.1	7.7
Willow Creek Pass	6J5	1/28	29	7.7	9.6	8.1
Roaring Fork River						
Aspen	7J22	1/28	35	9.4	14.5	--
Independence Pass Tunnel	6K4	1/31	33	8.3	12.0	10.7
Ivanhoe	6K10	1/30	37	8.1	13.4	11.1
Lift	7K27	1/28	34	9.2	16.9	10.5*
McClure Pass (A)	7K8	1/27	40	13.2	16.8	12.5*
Nast	6K6	1/27	19	3.6	5.3	--
North Lost Trail (A)	7K1	1/27	35	9.4	15.9	9.5
Plateau Creek						
Alexander Lake (A)(B)	7K3	1/27	41	12.3	13.5	12.9
Mesa Lakes	7K4	1/28	41	11.7	11.9	10.8
Park Reservoir (A)(B)	7K6	1/27	58	17.4	17.1	13.9
Trickle Divide	7K5	1/26	56	16.9	17.1	15.3

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

## RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Granby	465.5	250.0	93.4	214.6
Green Mountain	146.9	95.2	76.4	86.5
Williams Fork	96.8	40.2	15.8	-
Vega	32.1	20.0	5.0	-
Dillon	254.0	245.9	47.0	-

## SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Berthoud Pass	12/10	3.9	3.9	2.5	2.6
Blue River	11/23	4.2	3.5	2.6	2.7
Gore	11/9	4.9	3.1	2.1	2.5
Grand Mesa	11/10	12.5	12.5	9.0	-
Muddy Pass	11/3	11.1	7.4	6.1	6.4
Placita	12/7	9.3	8.4	3.9	5.1
Ranch Creek	12/10	8.7	6.3	5.6	6.2
Vail	12/29	12.3	8.6	4.3	7.4
Vasquez Siphon	12/13	11.0	7.7	6.8	7.4

ALL PROFILES 4 FEET DEEP

## STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	APRIL THROUGH SEPTEMBER		THIS YEAR	AVERAGE 1948-62
	FORECAST	YEAR		
	APRIL - SEPT.	% AVERAGE		
No forecasts issued until March 1, 1966.				

- (3) Plus diversions through Jones Pass Tunnel.
- (4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.
- (5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.
- (6) Observed flow plus diversion through Twin Lakes tunnel.

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

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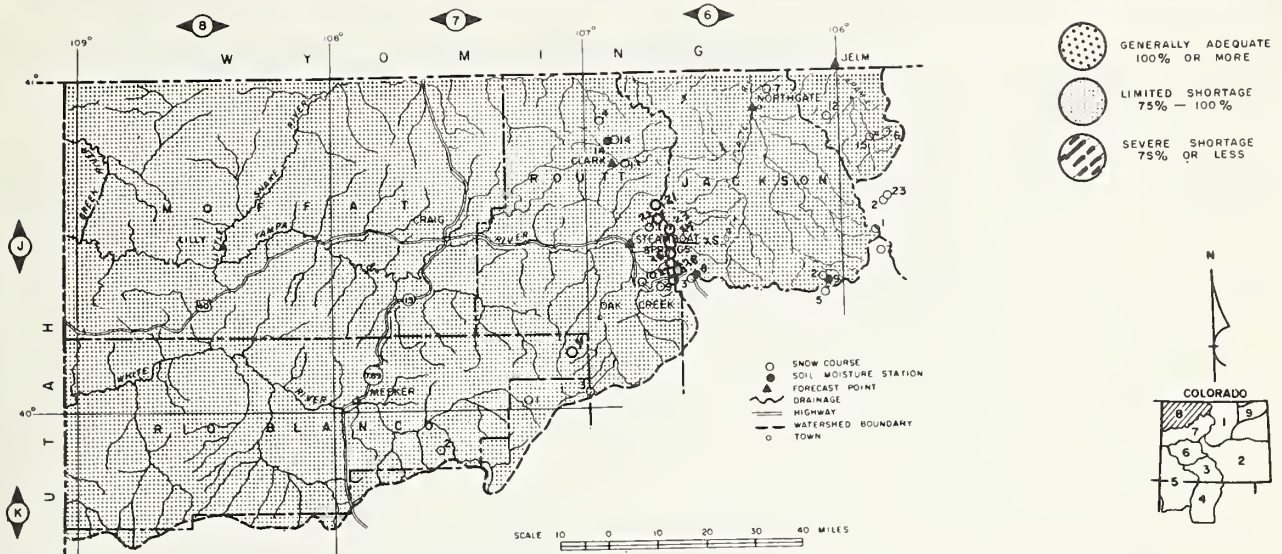
WATER SUPPLY OUTLOOK  
FOR THE SOIL CONSERVATION DISTRICTS IN THE  
**YAMPA, WHITE, AND NORTH PLATTE  
RIVERS WATERSHEDS IN COLORADO**

WATERSHED VIII

as of

February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



After last years abundant snow pack, the current snow looks very low, however, the season is young and none of the major drainages are so short of snow that they couldn't catch up with a few good storms.

Snow pack on the North Platte Drainage is 93% of normal and 83% of last year. The Yampa is slightly lower with snow indicating only 80% of average. The White River is the lowest of the three basins. Snow pack here is only 49% of last year, but still 71% of normal.

The early snow that fell over most of the state, melted, but it preformed a major function. It wetted all the mountain soils. This tends to increase spring runoff. Soils over these three basins is 147% of last year and 129% of the 1948-62 average.

Numerical forecasts will be started as of March 1. We consider it to early to make reliable forecasts as of this date.

**"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"**

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
Colorado

J. L. Hall, Area Conservationist,  
Glenwood Springs, Colorado



# SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
North Platte River						
Cameron Pass	5J1	1/29	40	14.2		13.7
Columbine Lodge	6J3	1/27	44	12.5	17.4	15.7
Deadman Hill (A)(B)	5J6	1/28	40	10.8	- -	8.8
McIntyre (B)	5J15	NS	--	- -	- -	- -
Northgate	6J7	1/27	16	3.4	5.0	3.9*
Park View	6J2	1/28	23	5.4	8.2	5.8
Roach (A)	6J12	1/28	30	8.4		11.1
Willow Creek Pass (B)	6J5	1/28	29	7.7	9.6	8.1
Yampa River						
Bear River	7J3	NS	--	- -	- -	- -
Clark (A)	6J13	1/26	33	9.2	12.7	- -
Columbine Lodge (B)	6J3	1/27	44	12.5	17.4	15.7
Dry Lake (A)	6J1	1/27	41	11.1	12.7	13.6
Elk River (A)	6J4	1/26	37	10.4	14.8	11.5
Hahn's Peak	6J14	NS	--	- -	- -	- -
Lynx Pass (B)	6J6	1/27	26	4.9	9.0	7.2
Rabbit Ears	6J9	1/27	49	15.0	17.3	19.1
Yampa View	6J10	1/27	30	7.4	11.3	9.8*
White River						
Burro Mountain (A)	7K2	1/27	39	9.0	16.1	11.0
Rio Blanco	7J1	1/24	25	5.8	14.4	9.9

# SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Hahn's Peak	11/3	19.0	11.0	8.9	- -
Laramie Road	10/23	12.4	11.9	7.1	7.6
Muddy Pass	11/3	11.1	7.4	6.1	6.4
Two Mile	10/26	9.1	6.5	4.4	5.8
Willow Pass	11/19	9.5	8.4	5.7	6.8

ALL PROFILES 4 FEET DEEP

# STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER				THIS
STREAM AND STATION	FORECAST	YEAR	AVERAGE	
	APRIL - SEPT.	% AVERAGE	1948-62	
No forecasts issued until March 1, 1966.				

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

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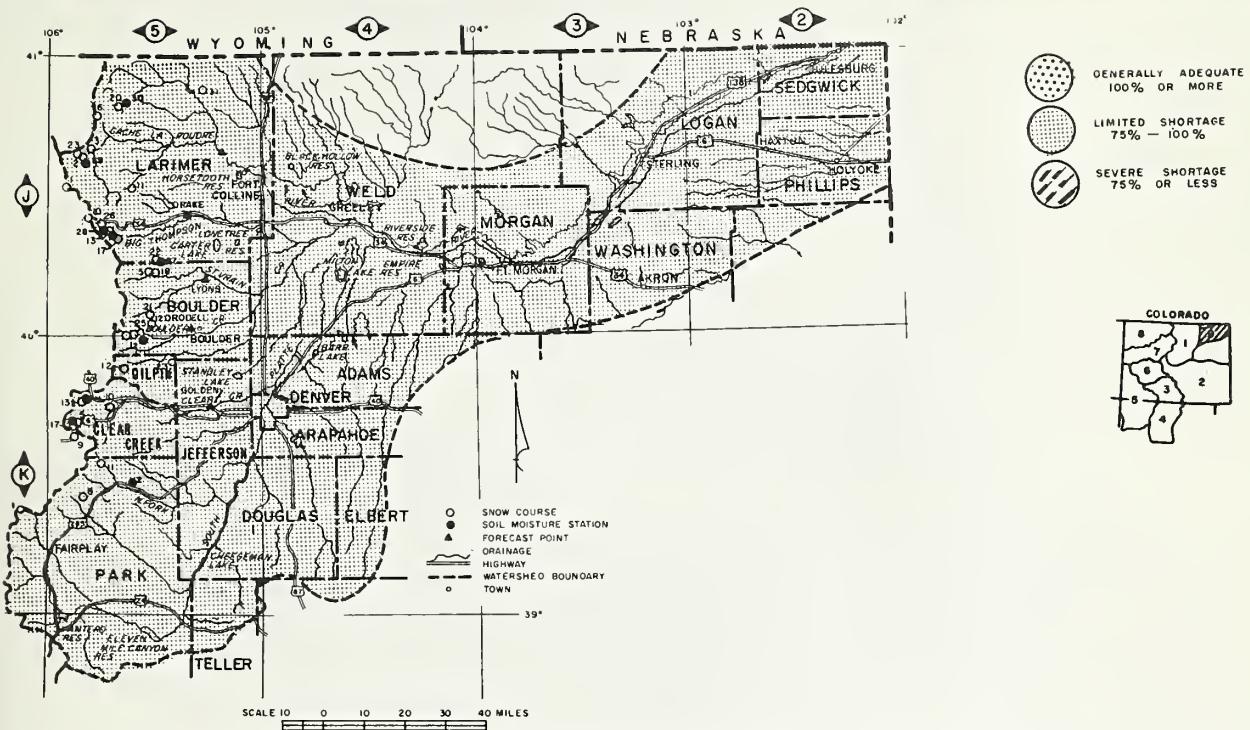
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WATER SUPPLY OUTLOOK  
FOR THE SOIL CONSERVATION DISTRICTS IN THE  
**LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO**  
as of

February 1, 1966

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Snow pack in the tributary streams and the main stem of the South Platte is only about 65% of the 1948-62 average. It is only 53% of last year at this time. Considerable snow is needed to insure a normal runoff this summer. There are some other compensating factors. Reservoir carry-over storage is excellent. Current conditions are 184% of last year and 138% of the 15 year normal. This will be an excellent supply for irrigation interests below these reservoirs.

The early snows that blanketed the mountain melted and left the mountain soils in excellent condition. There is considerably more moisture in the mountain soils than normal. The snow water will not have to fill the soil mantle, which will add to the stream flow.

Valley soils along the foothills are reported in fair to good condition while the Sterling and Fort Morgan are reporting good conditions.

Only about one-half of the season is passed, so there is plenty of time to improve conditions.

**“THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY”**

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,  
Colorado

Wallace L. Bruce, Area Conservationist  
Sterling, Colorado

# SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1948-62
South Platte River & Tributaries						
Baltimore	5K23	1/31	8	1.5	6.1	- -
Berthoud Falls	5K13	1/31	28	8.8	12.5	9.0*
Big South	5J3	1/29	5	1.1	2.9	2.0
Boulder Falls	5J25	1/29	18	4.4	11.6	7.9*
Cameron Pass (A)	5J1	1/29	40	14.2	15.6	13.7
Chambers Lake	5J2	1/29	14	3.1	8.8	6.0
Copeland Lake	5J18	1/27	4	0.7	3.2	3.8*
Deadman Hill (A)	5J6	1/28	40	10.8	NS	8.8
Deer Ridge	5J17	1/27	8	1.8	2.9	3.6*
Empire	5K10				6.5	4.9*
Geneva Park	5K11	1/31	8	1.6	NS	3.5*
Grizzly Peak (B)	5K9	1/27	31	7.0	16.4	11.5
Hidden Valley	5J13	1/28	19	3.9	7.3	7.5
Hoosier Pass	6K1	1/29	23	5.5	12.6	8.1
Hour Glass Lake	5J11	NS	--	--	--	4.3
Jefferson Creek	5K8	NS	--	--	--	6.0*
Lake Irene (B)	5J10	Est.	40	11.5	18.4	14.1
Long's Peak	5J22	1/30	17	3.5	9.3	7.6*
Lost Lake	5J23	1/29	22	4.9	11.5	8.2*
Loveland Lift No. 1	5K24	1/27	41	10.7	17.2	- -
Loveland Pass	5K5	1/27	27	6.0	14.0	9.6
Pine Creek	5J31	1/28	3	0.5	0.6	- -
Red Feather	5J10	1/28	12	2.4	2.8	5.1*
Two Mile	5J26	1/28	25	6.1	10.3	9.0*
University Camp	5J8	1/29	23	5.8	17.5	12.9
Ward	5J21	1/29	4	0.7	3.9	4.0*
Wild Basin	5J5	Est.	28	4.9	9.6	9.4
Bennett Creek	5J33	1/26	14	2.6		

## STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER			THIS	
STREAM AND STATION	FORECAST	YEAR	AVERAGE	1948-62
	APRIL - SEPT.	% AVERAGE		
No forecasts issued until March 1, 1966.				

- Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- Observed flow plus by-pass to power plants.
- Observed flow minus diversions through Jones Tunnel.

NOTE: \* - 1948-62 (adjusted averages)  
 NS - NO SURVEY  
 (A) - AIR OBSERVED  
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by  
 Jack N. Washichek and  
 Don W. McAndrew  
 Soil Conservation Service  
 Colorado State University  
 Fort Collins, Colorado

## RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Carter	108.9	106.3	70.5	54.0
Cheeseman	79.0	79.0	21.3	49.4
Eleven Mile	97.8	87.6	28.3	74.2
Empire	37.7	25.8	15.4	22.5
Horsetooth	143.5	78.9	69.4	61.1
Jackson	35.4	30.0	27.6	26.8
Julesburg	28.2	19.8	21.2	20.0
Prewitt	32.8	20.8	0	15.8
Point of Rocks	70.0	65.9	23.7	44.8
Riverside	57.5	49.1	29.1	38.8

MEASURED FIRST OF MONTH

MEASURED FIRST OF MONTH

## SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	10/26	6.9	5.5	3.2	4.8
Beaver Dam	10/26	7.1	5.5	3.0	3.8
Clear Creek	10/29	9.5	8.0	7.0	6.7
Feather	10/23	10.1	5.1	4.2	4.6
Guard Station	10/26	6.9	5.0	2.8	3.4
Hoop Creek	12/15	4.9	3.6	2.6	2.7
Hoosier Pass	11/23	7.8	4.8	4.3	5.1
Kenosha Pass	11/23	4.4	3.1	2.3	2.6
Laramie Road	10/23	12.4	11.9	7.1	7.6
Two Mile	10/26	9.1	6.5	4.4	5.8

ALL PROFILES 4 FEET DEEP

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# LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

## STATE

Colorado State Engineer  
New Mexico State Engineer  
Nebraska State Engineer  
Colorado Experiment Station  
Rocky Mountain Forest and Range Experiment Station

## FEDERAL

Department of Agriculture

Forest Service  
Soil Conservation Service

Department of Interior

Bureau of Reclamation  
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Indian Service

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Public Service Company of New Mexico

## MUNICIPALITIES

City of Denver                      City of Greeley  
City of Boulder                      City of Fort Collins

## WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association  
Colorado River Water Conservation District

## IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company  
San Luis Valley Irrigation District  
Santa Maria Reservoir Company  
Costilla Land Company  
Uncompahgre Valley Water Users' Association  
Twin Lakes Reservoir and Canal Company  
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